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Rediscovery of *Strobilanthes andersonii* (Acanthaceae) from the Western Ghats of India

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ABSTRACT

Strobilanthes andersonii, an astonishing species rediscovered after the collections of Richard Henry Beddome from the Anamalai Hills of Western Ghats of India. Detailed description, distribution and photographs of the species are also provided.

KEYWORDS: Anamalai hills, *Didyplosandra*, lectotype

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INTRODUCTION

Strobilanthes Blume (1826)¹, a diverse genus in the family Acanthaceae, consists of ca. 450 species confined to the south and Southeast Asia, Melanesia (Carine & Scotland 1998, Carine & Scotland 2002)^{2,3}. In India, the genus includes ca. 150 species, of which 61 species occur in south India alone (Carine & Scotland 2002, Venu 2006)^{3,4}. The south Indian species are chiefly distributed in the Western Ghats and a few are in the Eastern Ghats also. Most of the peninsular Indian species are endemic too (Carine and Scotland 2002, Wood and Scotland 2009)^{3,5}. The species namely *S. andersonii* Bedd., *S. bolampattiana* Bedd., *S. cuspidata* (Benth.) T. Anderson, *S. lawsoni* Gamble, *S. lanata* Nees, *S. matthewiana* R.W. Scotland and *S. papillosa* T. Anderson are narrow endemics from the Western Ghats of India (Venu 2006)⁴.

Strobilanthes andersonii was described by R. H. Beddome based on his collections from Anamali hills, Tamilnadu in 1864⁶. There are only three specimens of *S. andersonii* is available in the whole herbaria of the world, in which two are found in Kew Herbarium and one deposited in Madras Herbarium without collection date. On the whole, Beddome was the collector of those specimens. Moreover, there is no collection reports on this plant is available after Beddome's collections. An illustration of the same has been drawn by Beddome and published in his publication "Icones Plantarum Indiae Orientalis" in 1874⁷. Thomas Anderson (1867)⁹, C. B. Clarke (1884)¹⁰ and Gamble (1924)¹¹ were given account on *S. andersonii* in their respective publications solely based on the descriptions and illustrations of Beddome. Bremekamp (1944)¹² divided *Strobilanthes* and closely related genera such as *Hemigraphis*, *Aechmanthera* and *Stenosiphonium* into 54 genera in which *S. andersonii* Bedd. treated under the genus *Didyplosandra*.

Floristic exploration during December 2008 by the authors in Munnar, which is southwest most part of the Anamali hill ranges, encountered with the remarkable taxon *S. andersonii* in bloom (Figure 1). The material was compared with the herbarium specimens and illustrations of *S. andersonii* and authenticated it as *S. andersonii* and the collections we made are the first collections which are around 150 years after Beddome. A detailed field survey revealed that the species shows narrow distribution and we located four populations.

TAXONOMY

Strobilanthes andersonii Bedd. Madras J. Lit. & Sci. 1: 55, 1864; T. Anderson in J. Linn. Soc. Bot. 9:469, 1867; Beddome in Trans. Linn. Soc. London, Bot. 25: 222, 1866 & Icon. Pl. Ind. Orient. 48, t. 208, 1874; C. B. Clarke in Hook. Fl. Brit. India 4: 450, 1884; Gamble in Fl. Pres. Madras, 1042, 1924.

Didyplosandra andersonii (Bedd.) Bremek. Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 41: 269, 1944; Kumari in A. N. Henry *et al.*, Fl. Tamilnadu 2: 144, 1987.

Type: Not cited. Lectotype (designated here): India: Tamilnadu, Anamalai Hills, Beddome 63 (K!).

Description

A large semelparous straggling shrub, to 4 m high. Mature stem terete, young stem angled and hirsute. Leaves opposite, decussate, anisophyllous; lamina ovate to elliptic, 7–18 × 4–10 cm, rounded or subcordate at base, margin crenulate, shortly acuminate at apex, membranous, lateral nerves 4–8 pairs, adaxial and abaxial surface hirsute; petioles 2.5–4.5 cm long, long hairs present throughout. Inflorescences spikes, solitary, terminal or rarely axillary, to 7 cm long, drooping. Bracts orbicular, 1.25–1.8 × 1.2–1.7 cm, slightly concave, pale green to pink, glabrous, margin ciliate, rounded at apex; bracteoles oblanceolate, 1.25–1.7 cm long, glabrous, margin ciliate, acute at apex. Calyx to 1.8 cm long at anthesis, divided almost to base, lobes subulate, glabrous, margin ciliate. Corolla 2.1–2.5 cm long, sub-campanulate, white–pale blue, nerves prominent and bluish; lobes orbicular, emarginated. Stamens 4, didynamous, sub-equal, stamina sheath of filaments united with ¼ part of the corolla throat, glabrous, truncate; filaments arising from different height, glabrous; anthers ca 2.5 mm long, sagittate. Ovary 2–2.5 mm long on a disc, glabrous, ovules 4; style slender, ca 2.2 cm long, glabrous.

Habitat and distribution

It grows as understory in shola forest at an altitude of ca 1800 m. This species shows a narrow distribution in the Anamalai hill ranges especially in Munnar.

Specimens examined

India: Tamilnadu, Anamalai Hills, Beddome 63 (K!); Beddome s.n. (K!); Munnar, Pradeep A. K. *et al.* 68817 (RHT!).

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Figure 1: *Strobilanthes andersonii*: A. Habit showing plants in bloom, B. Inflorescence C. Infructescence.

Photographed by Pradeep A. K.

REFERENCES

1. Blume CL. Bijdragen tot de Flora van Nederlandsch Indie 14. Ter Lands Drukkerij, Batavia, 1826: 781.
 2. Carine MA and Scotland RW. Pollen morphology of *Strobilanthes* Blume (Acanthaceae) from southern India and Sri Lanka. Rev. Palaeobot. Palynol. 1998; 103: 143–165.
 3. Carine MA and Scotland RW. Classification of *Strobilanthiniae* (Acanthaceae): trying to classify the unclassifiable? Taxon 2002; 51: 259–279.
 4. Venu P. *Strobilanthes* Blume (Acanthaceae) in Peninsular India. Botanical Survey of India, Kolkata, 2006: 59–62.
 5. Wood JRI and Scotland RW. New and little-known species of *Strobilanthes* (Acanthaceae) from India and South East Asia. Kew Bull. 2009; 64: 3–47.
 6. Beddome RH. Contributions to the Botany of Southern India. Madras J. Lit. & Sci. 1864; 1: 55.
 7. Beddome RH. Icones Plantarum Indiae Orientalis. Gantz Brothers, Madras 1874: 1: 48-49, 208.
 8. Anderson T. An enumeration of the Indian species of Acanthaceae. J. Linn. Soc. 1867; 9: 425–526.
 9. Clarke CB. Acanthaceae. In: Hooker, J.D. (Ed.), Flora of British India, L. Reeve, London, 1884: 2: 435.
 10. Gamble JS. Flora of the Presidency of Madras, West, Newman & Adlard, London, 1924; 2: 1025–1044.
 11. Bremekamp CEB. Materials for a monograph of the *Strobilanthiniae* (Acanthaceae). Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 1944; 41: 177.
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